

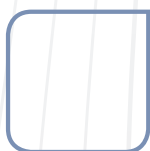
# Ara® Cool 1034 XW 90

Low temperature curing hardener with very long pot life

A modified, Mannich-base type hardener, providing high reactivity at low temperatures to corrosion protection coatings for pre-treated steel surfaces

**Ara® Cool 1034 XW 90 is an ultra high solid hardener designed for applications requiring outstanding hardness development in combination with long pot life.**

It allows for very low VOC formulations with good EHS-profiles. No induction time is needed.

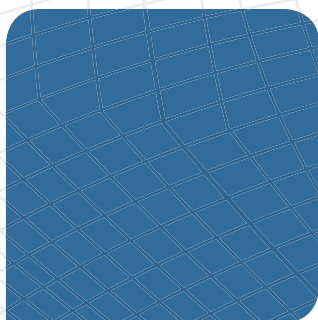


## Applications

- > Anti-corrosion coatings on pre-treated (blasted) steel
- > Marine, HDP and maintenance/repair
- > A multitude of general protective and decorative paints

## Key features

- > Ultra high solid anti corrosion hardener for cure down to 5°C
- > Extremely long pot life versus outstanding low temperature reactivity
- > SVHC-free



# Ara® Cool 1034 XW 90

Low temperature curing hardener with very long pot life

## Typical product characteristics at delivery

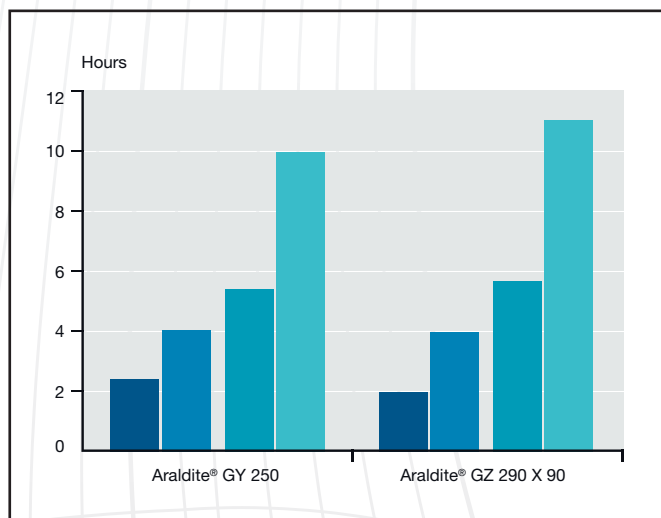
Viscosity	at 25°C	1 000 - 2 500 mPa.s
Recommended HAEW		105 - 155 g/Eq
Amine value		415 - 450 mg KOH/g

## Typical characteristics when combined with Araldite® GZ 290 X 90 resin

Mix ratio	at HAEW = 155	55 : 100
Solid content of the mix		90 %
Pot life	at 23°C	1.5 hours
Tack free time	at 5°C	~ 5.5 hours
	at 23°C	~ 2 hours

## Cure speed at different temperatures

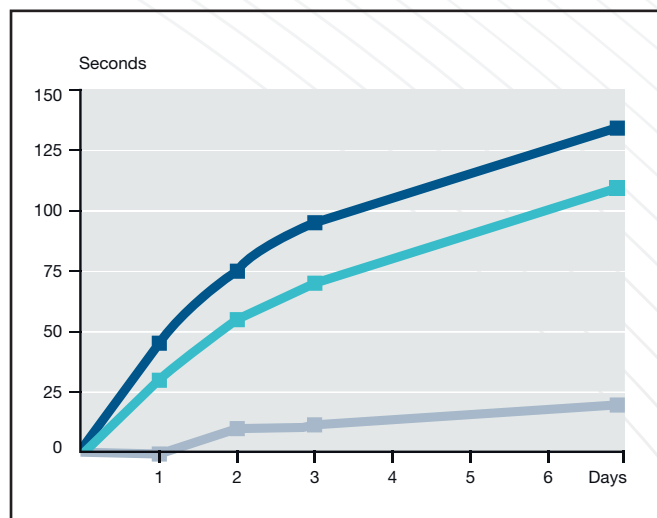
in combination with different resins



■ Dust free time at 23°C ■ Through cure time at 23°C  
■ Dust free time at 5°C ■ Through cure time at 5°C

## Pendulum hardness at 5°C

in combination with Araldite® GZ 290 X 90



■ Ara®Cool 1034 XW 90 (100% stoichiometry)  
■ Ara®Cool 1034 XW 90 (80% stoichiometry) ■ Aradur® 450-1S

Learn more on [www.huntsman.com/advanced\\_materials](http://www.huntsman.com/advanced_materials)

For any other information, please send an e-mail to [advanced\\_materials@huntsman.com](mailto:advanced_materials@huntsman.com)

Europe +41 61 299 20 41 India, Middle East, Africa & Turkey + 91 22 4095 1556 Asia / Pacific + 86 21 2208 7588 Americas +1 888 564 9318



Registered for  
**REACH**

**Legal information** All trademarks mentioned are either property of or licensed to Huntsman Corporation or an affiliate thereof in one or more, but not all, countries. Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. or Huntsman Advanced Materials (Guangdong) Ltd. ("Huntsman"). The following supersedes Buyer's documents. While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES. No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Data and results are based on controlled conditions and/or lab work. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights. The Product may be or become hazardous. Buyer should (i) obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, together with proper shipping, handling and storage procedures for the Product, (ii) take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product and (iii) comply with and ensure that its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product comply with all safety information contained in the applicable Material Safety Data Sheets, Technical Data Sheets or other instructions provided by Huntsman and all applicable laws, regulations and standards relating to the handling, use, storage, distribution and disposal of and exposure to the Product. Please note that products may differ from country to country. If you have any queries, kindly contact your local Huntsman representative.

© 2016 Huntsman Corporation. All rights reserved. Ref. No. AdMat Ara® Cool 1034XW90\_11.16\_EN\_EU